

Biography

Oscar R. Hernandez

Clearances: TS/SCI and Q

[REDACTED]

MBA University of Phoenix, Albuquerque, NM Branch
MSEE University of New Mexico, Albuquerque, NM
BS Mathematics, West Texas A&M University, Canyon, TX
AAS Electronics Engineering Technology, Del Mar College Corpus Christi, TX

Objective: To apply unique technical and programmatic background experience in assessing systems to enhance and develop actionable intelligence for national security programs.

Over 40 years' experience related to hardware design, weapons testing, intelligence analysis and management of both test operations at Sandia's Weapons Evaluation Test Laboratory located at the USDOE Pantex Plant and the Systems Test Equipment Design Department.

As part of the SNL Field Intelligence Element, performed research and analysis on national security issues related to intelligence reports, vulnerability assessments, technical systems analysis, and law enforcement technical analysis supporting prosecution teams for the Federal Bureau of Investigation, Department of Justice US Attorneys and Homeland Security.

Law enforcement interactions included the analysis of case technical information and items from a systems perspective for violations of US laws and regulations. Additionally, completed a 3-year onsite assignment at the FBI's Weapons of Mass Destruction Directorate, Intelligence Analysis Section, Weapons and Tradecraft Unit in Washington, DC as a team lead for the radiological - nuclear group.

Provide support to the DOE Export Control and Regulatory Compliance / Interdiction Program on the Nuclear Interdiction Analysis Group (NIAG). In this capacity, perform reviews on components to assess for weaponization related export control violations. Perform Country Studies analysis on weaponization and commodities related to emergent technologies. Previously supported the IAEA Nuclear Suppliers Group for the Dual Use Guide and the Trigger List International Agreements, along with preparing commodity training sections for the DOE International Export Control Program (INECP).

Earlier activities at Sandia National Laboratories Stockpile Surveillance Program included nuclear weapons systems level testing of arming, fuzing and firing assemblies in replicated flight environments for acceleration, temperature and vacuum.

Recent experience includes the design and test of complex RF (radio frequency) systems for capturing and extracting RF signal information of interest. Specialized training for supporting these activities includes Techniques of Modern Radar; LABview and DIAdem - Signal Processing, Pattern Recognition Algorithm development, and Digital Systems Design. This research was funded by NNSA to explore RF Systems emanations from multiple types of activities including high-explosive detonations, detonators, lasers, electrical systems, 3D additive printing systems and nuclear reactor patterns of life.

Interests include leading teams in new challenging endeavors, cyber analysis of traffic, virus exploration, pattern recognition, home improvement projects and riding dual sport motorcycles.